REMARKS

This responds to the Office Action mailed on <u>August 24, 2005</u>, and the references cited therewith. Reconsideration of the application is respectfully requested.

By this amendment, claims 1 – 4, 7, 9 – 12, 14 – 17 and 19 - 20 are amended, claim 13 is canceled without prejudice, and no claims are added; as a result, claims 1 – 12 and 14 – 26 are now pending in this application.

Allowable Subject Matter

Claims 7, 22 and 26 have been objected to as being dependent on a rejected base claim but are stated to be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claims 7 and 22 have been rewritten in independent form including all the limitations of the base claim and any intervening claims and are believed to be allowable. Claims 23 – 26 are believed to be allowable at least because of their dependency on claim 22.

§102 and §103 Rejection of the Claims

Claims 1 – 6, 8 – 21 and 23 – 25 are rejected under 35 U.S.C. § 102(b) as being anticipation by Maksimovic (U.S. Patent No. 5,867,379).

Applicants' claim 1, as amended, is directed to an active-power filter for regulating a DC input current drawn from a DC power source. The active power filter comprises control circuitry to combine an integrated output-voltage sense signal, an input-voltage sense signal and an output-load feedforward signal to generate a control signal, and power converter circuitry to regulate the DC input current based at least in part on the control signal. As recited in claim 1, the output-load feedforward signal is generated by internal circuitry of an output-load subsystem which draws DC output current through the active power filter. As also recited in claim 1, *ripple*

in the DC input current produced by changes in the DC output current drawn by the output-load

subsystem is reduced by operation of the control circuitry and the power converter circuitry.

Maksimovic is directed to "active power factor correction". Active power factor

correction is used to produce a sinusoidal output current to match the sinusoidal input voltage of

an AC input power system. Maksimovic states that "the present invention relates to switched

mode power supplies, mainly boost converters, used to achieve high power factor rectification of

the input AC line voltage." (See column 1, lines 6 – 8) Accordingly Maksimovic operates on an

AC input voltage. Applicants' claims 1, 14, 17 and 20, on the other hand, recite drawing DC

input current from a DC power source. Maksimovic shows an AC input in FIG. 1 which

generates a sinusoidal voltage (full-wave rectified line voltage) V_g and a sinusoidal current i_g

(See Maksimovic FIG. 1, and column 2, lines 45 – 51). Applicants respectfully disagree with the

Examiners statement that the input current i_g in Maksimovic is a DC input current.

Applicants further submit that there is no teaching, suggestion or motivation in

Maksimovic to use an output-load feedforward signal, which is generated from an active load

subsystem. The Examiner states that Maksimovic's KVg in FIG. 1 corresponds to Applicants'

output-load feedforward signal. Applicants respectfully disagree with this and assert that

Maksimovic's KVg in FIG. 1 is an input voltage. In Maksimovic, reference number 4 (FIG. 1) is

a load. In Maksimovic, there is no actively generated signal provided by the load that is used to

regulate input current of the system. In Applicants' claim 1, a control signal actively generated

by a load (e.g., the load subsystem) is used by the control circuitry. As recited in claim 3, for

example, the output load feedforward signal indicates when the current or power drawn by the

load will change (see claim 3). Applicant's find no such teaching, suggestion or motivation of

this in Maksimovic.

Applicants' claims 1, 14, 17 and 20 are concerned with reducing DC input current ripple

drawn on a DC power source. This is different from Maksimovic who is concerned with

regulating an *output* generated from an *AC* source. The DC input ripple results from changes in

DC current drawn by the load subsystem. Applicants' active power filter actively responds to

changes in the current drawn by the output load subsystem to regulate the DC current drawn by the active power filter from the DC power source.

Applicants submit that Maksimovic does not teach, suggest, or motivate the following elements of Applicants' claims:

1) Drawing DC input current from a DC power source (Maksimovic rectifies an AC source);

2) Regulating DC input current (Maksimovic is concerned with regulating the output);

3) Producing an unregulated DC output current (Maksimovic is concerned with regulating the output voltage);

4) Actively reducing ripple in the DC input current produced by changes in the DC output drawn by a load subsystem (Maksimovic's goal is to obtain input current proportional to a full-wave rectified line voltage);

5) Using a control signal that is actively generated by a load (e.g., the load subsystem) that indicates when the current or power drawn by the load will change (see claim 3) (Maksimovic discloses only a passive load. There is no suggestion that the current draw of the load changes.)

Therefore, Maksimovic cannot anticipate Applicants' claimed invention. Furthermore, Applicants submit that there would be no motivation to combine Maksimovic with other references to result in Applicants' claimed invention.

In view of the above, Applicants submit that claims 1 – 6 and 8 – 21 are allowable over Maksimovic.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Gregory J. Gorrie at (480) 659-3314 or Applicant's below-named representative at 310-647-3723 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0888.

Respectfully submitted,
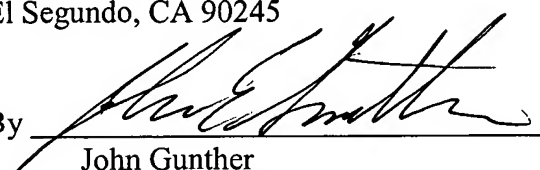
Joe A. Ortiz et al.

By their Representatives,

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Date __11/22/05__   By _____
                                         John Gunther
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this _22_ day of November, 2005.

__John Gunther__   _____

Name   Signature